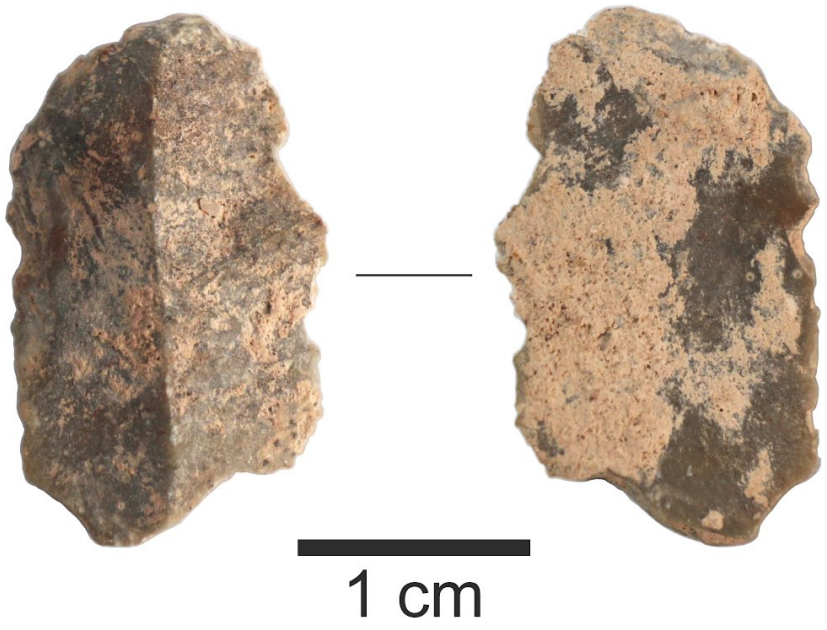
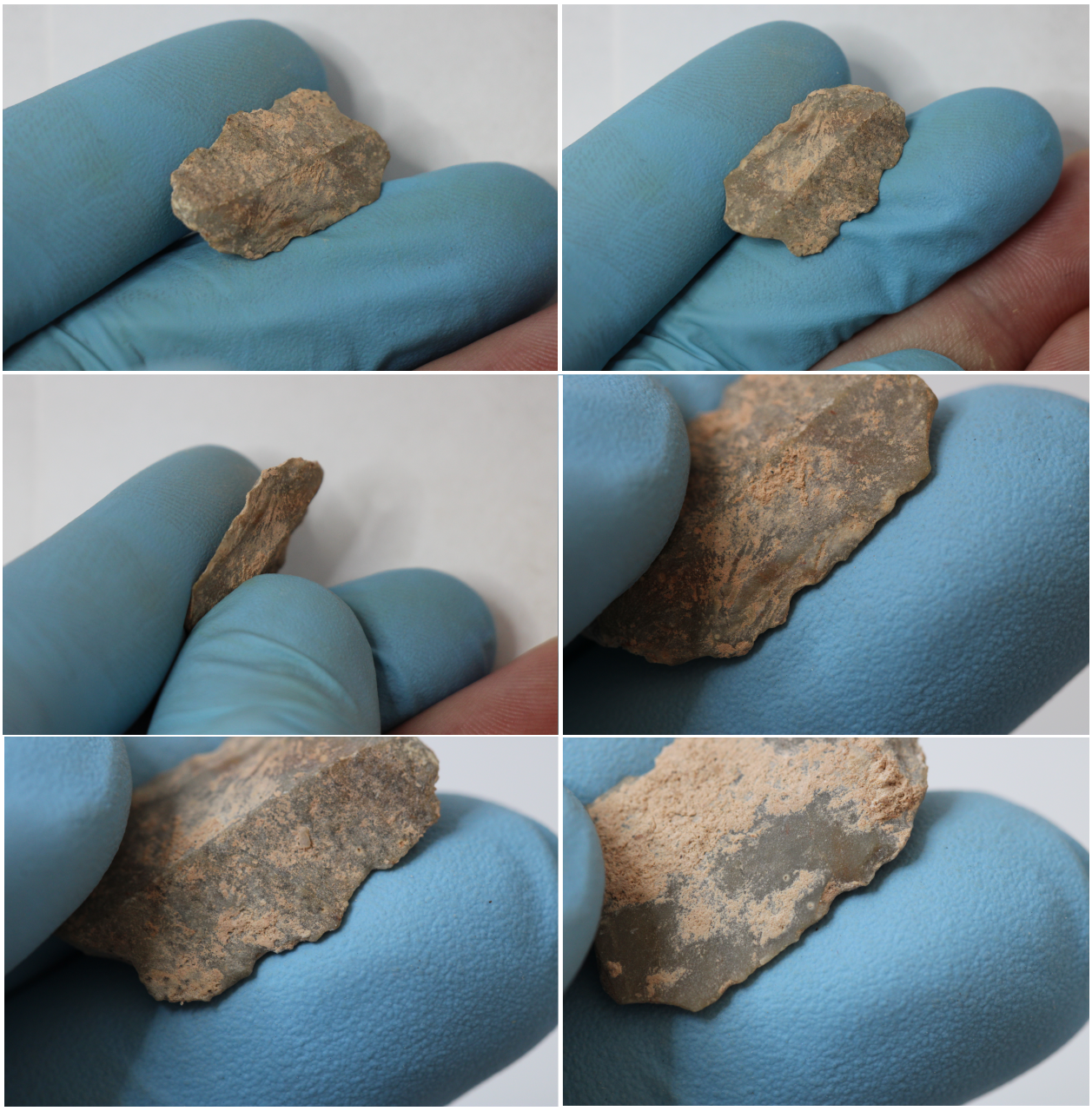
II.9. Taxon F — E/Ef: Tools on blade, modified/used blades or blade-like flakes
(12 items; #890–901)

#890. Item no. 2311-16882

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	11/01/2019	B1-NW	6.60/ 6.55	6.58	283905.72	2724523.29	1601/ 1604	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F	Blade, used?	23	14	4	1.11	V		



Characterization. This artefact is a fine example of a thin, tertiary blade, probably a tool-on-blade. The blade is fragmentary, its distal section is missing, and sediment concretions affect especially the smooth, slightly concave ventral side. The dorsal has a low longitudinal ridge, delimiting a left side that is certainly a previous blade extraction scar. The platform appears isolated, by pression or grinding, minimally prepared through faceting or grinding, slightly tilted towards the dorsal side, and without an evident *eraillure* scar on the corresponding section of the ventral face. The proximal section of this side reveals a possible shallow impact bulb, obstructed by sediment concretions. The right margin is the alleged working edge of a potential cutting tool, revealing the serrated profile and fine micro-notching, but not sufficient micro-scarring as it would be expected. This artefact is a possible cutting tool on blade.



#891. Item no. 3083-17170

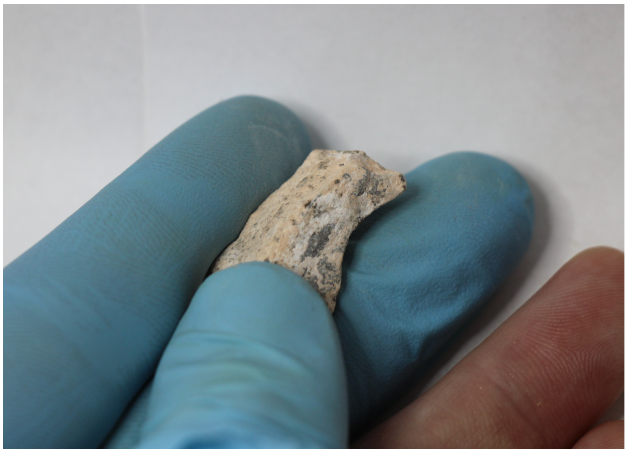
Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	20/01/2019	A3-SW	6.50/ 6.45	6.46	283904.87	2724524.84	1604	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		

Ef, F?	Blade-like flake, used?	28.3	15.4	7.5	3.51	V		

Characterization. This artefact is a high-ridged blade-like flake, not very clear whether a tertiary or secondary extraction, likely obtained from the corner of a tabular core of green limestone, with a coating of sediment deposited on both sides. The platform occupies the entire proximal end; it is flat, wide, unprepared, tilted to the left and towards the ventral side, and partly lipped. The distal end appears modified, by burination (by the extraction of a narrow, small, blade-like flake along the edge), which produced a burin-like termination. However, there is no sufficient evidence to confirm that this modification is of human origin. Yet, the artefact can still be a tool-on-flake, as the right edge does present traces of use-wear, in the form of micro-serration and discontinuous micro-notches, consistent with the potential functionality as a cutting tool.

#892. Item no. 2457-17038

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	11/01/2019	A7-SW	5.80/ 5.75	5.76	283904.97	2724528.64	1604	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F?	Blade, used?	26.8	15.3	7.5	3.49	V		

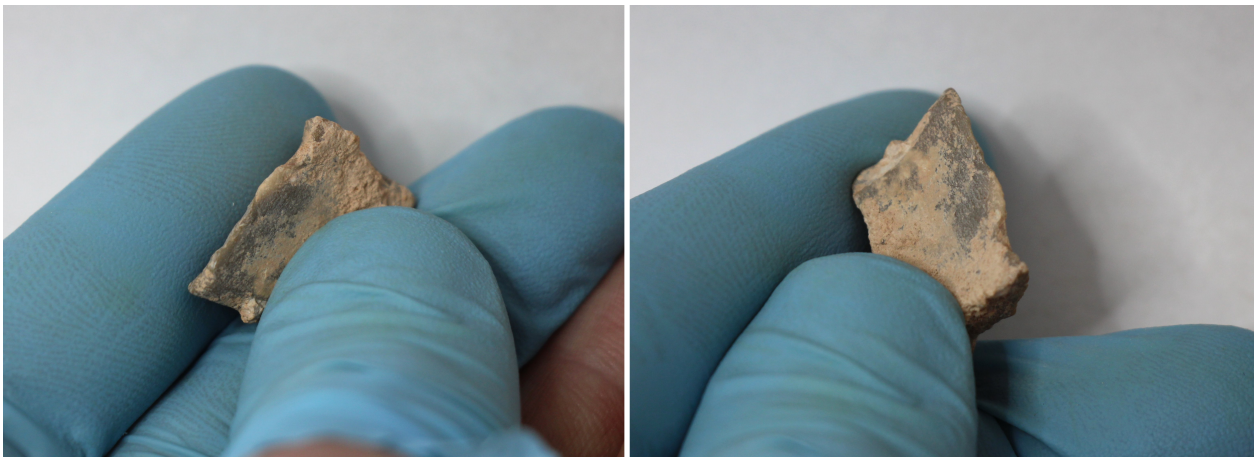


Characterization. This artefact is a possible tool-on-blade, made on a secondary blade proximal fragment, with a morphology and presumed functionality obstructed by the thick coating of white carbonate depositions. The dorsal ridge is tall, separating the face into one cortical (right) and one decorticated sides, equally affected by carbonates. The wider end is probably the fracture plane that separated this piece from the proximal segment of the blade. The distal end presents the scars of possible abrupt retouch flakes. The right, texturized, dorsal side is suitable for the finger-resting, grabbing section of the tool. The suspected functionality was a concave scraper, a “spokeshave” for cleaning wood branches or bone shafts. This is

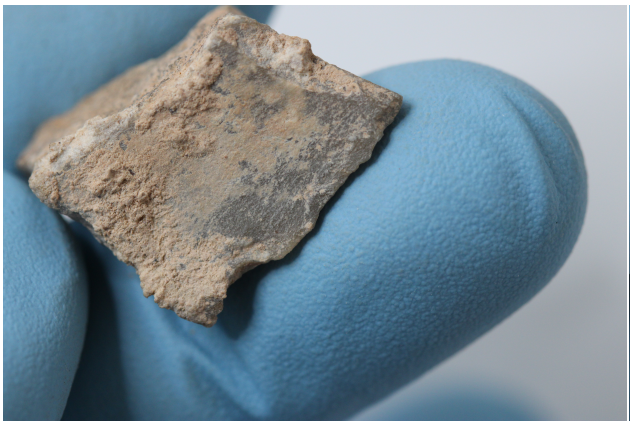
indicated by the wide notch occupying the distal segment of the left edge, with a smooth, apparently polished, functional concave edge. However, the thickness of the coating layer obstructs a proper understanding of the function of the tool.

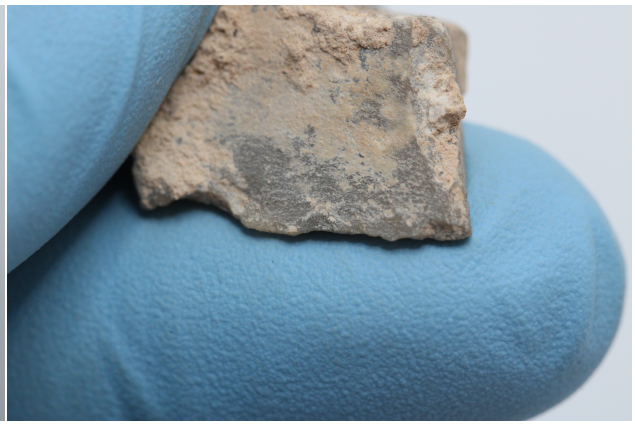
#893. Item no. 2242-17024

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	10/01/2019	B1-NE	6.45/ 6.40	6.42	283906.12	2724523.09	1604	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F	Blade, used	18.2	17.8	9	3.04	V		



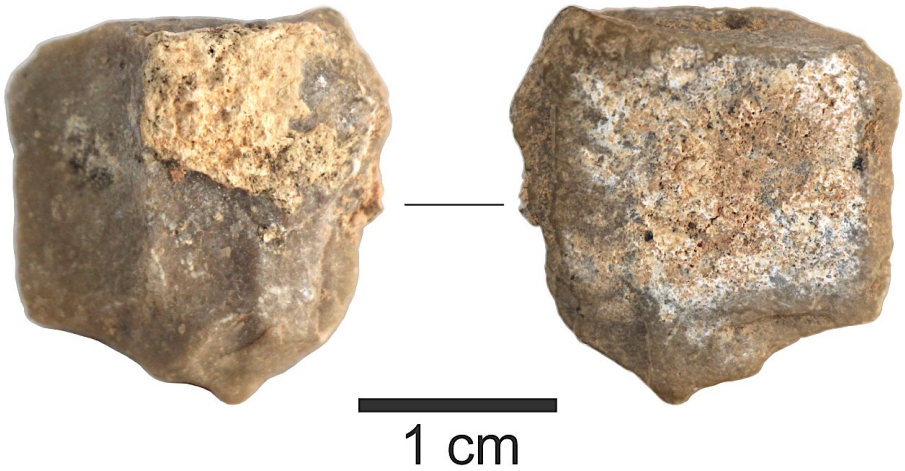
Characterization. This small, but robust, artefact is a tool-on-blade; a used microlith tool, made on the proximal or medial fragment of a high-ridged secondary corner blade, obtained from the



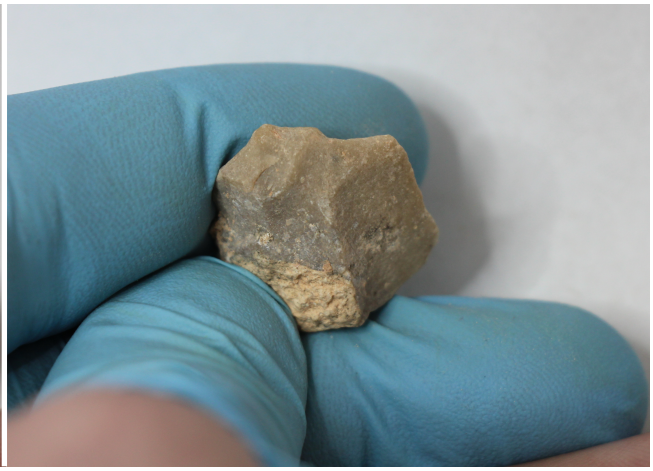
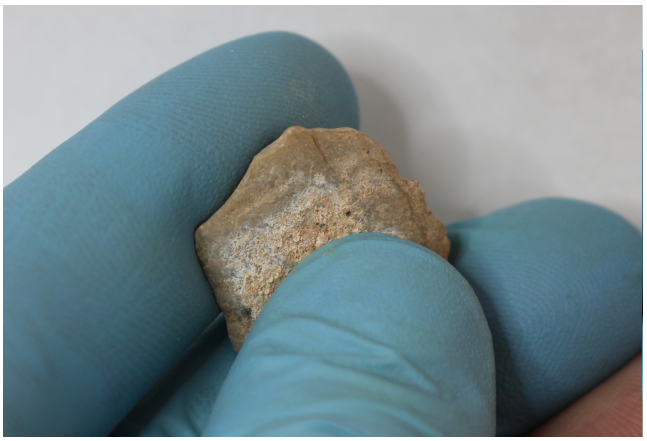


corner of a tabular green limestone core. Both ends are missing, but one of the fracture planes has an edge opening wide over the ventral side, suggesting it once formed part of the proximal end, meaning that the platform was probably removed after the extraction. The right dorsal surface is cortical, suitable for the finger-resting/ grabbing section of a cutting tool handheld in the modality of a backed knife. The left edge, sharp and thin, is the working edge of a cutting tool. It bears the evidence of use-wear, in the form of a worn-out and polished edge, revealing pressure applied perpendicularly against the edge, with little lateral pressure. The scar-like features, visible on the ventral side of the edge, are rather the natural product of the impact ripples. The use involved a perpendicular position and hard pressure, suggesting the tool was utilized to cut relatively hard materials.

#894. Item no. 2731-17045



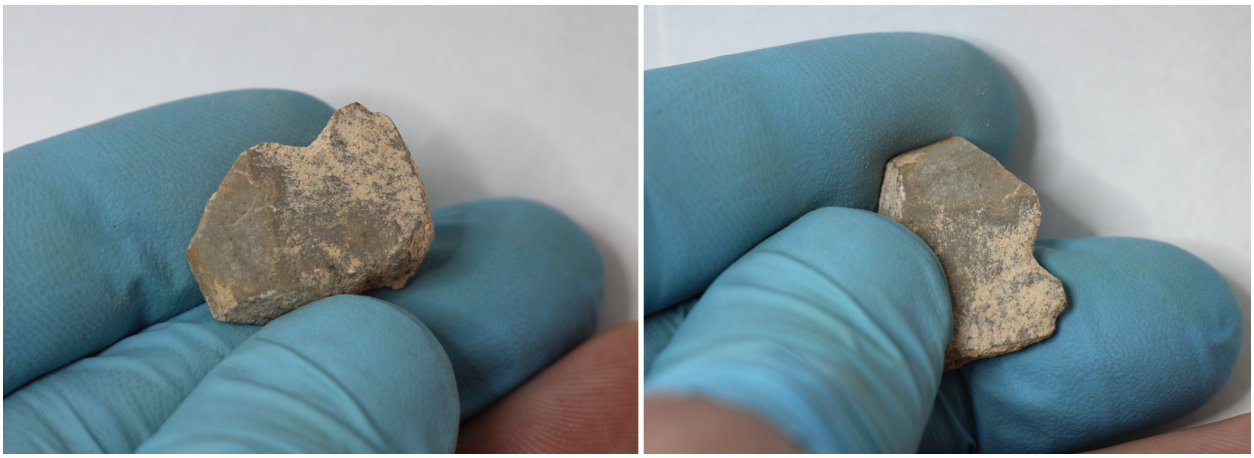
Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	15/01/2019	C2-SE	6.00/ 5.95	5.95	283907.42	2724523.64	1604	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F	Blade, modified	20.2	19.7	9.7	3.77	V		

Characterization. This artefact is the distal fragment of a secondary blade or blade-like flake of fine-grained green limestone that keeps a small amount of cortex on the proximal dorsal face. This item is probably a finished and used tool-on-blade. The flat ventral side is mostly covered by sediment concretions. The proximal section is missing, removed by an irregular fracture plane, probably produced by bending the original blade. The left side of the dorsal face contains the evident scar of a previously extracted microblade. The distal dorsal area is clearly modified by percussion retouch, in order to obtain the isolated peak of an engraver or a similar instrument, which also presents the possible indicators of pressure retouch on its left side. The retouch left behind micro-scars on the adjacent area of the ventral side. A closer look at the functional peak shows it became eroded and rounded, also polished, suggesting that the tool has been used.

#895. Item no. 3279-17083

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	22/01/2019	C4-SW	-	5.85	283906.67	2724525.65	1604/ 1604A	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E	Blade	20	16	6.8	2.02	V		



Characterization. This artefact is the distal fragment of a secondary blade, a corner blade obtained from a tabular core of pale-green limestone, with thick cemented sediment concretions covering the entire ventral side and most of the proximal area, obstructing the observation of the fracture plane. The right side is narrow and cortical, contributing to a shape suitable for a backed knife/cutting tool. The left edge is thin and sharp, with potential for the working edge of a cutting tool. This edge reveals a deep notch on its proximal segment, as well as a shallow micro-scar removal on its distal segment, both possibly related to use-wear. Due to interfering coating, it is difficult to defend a clear anthropical origin for all the features.

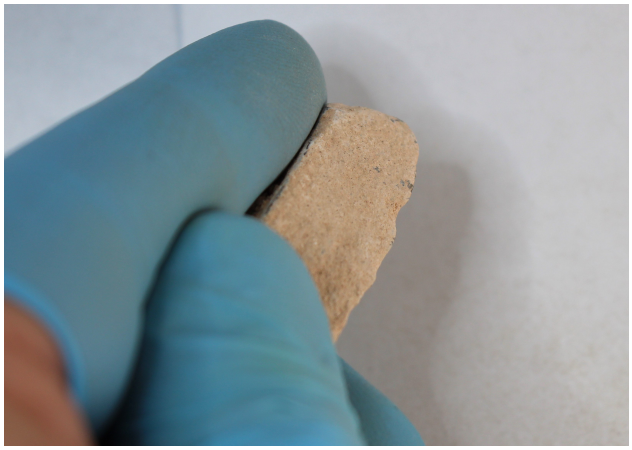
#896. Item no. 3341-17340

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	23/01/2019	A7-SE	-	5.64	283905.12	2724528.57	1604A	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F	Blade, used	31	16.3	7	3.53	V		

Characterization. This artefact that looks like a point is actually a ridge-following tertiary blade of dark-green limestone, with a peculiar, wide, large, and excessively tilted platform, and with a broken/missing distal end. The wide, flat, unprepared platform is tilted to the right, the small white-dotted impact spot is visible on the ventral edge, associated with a slight convexity on the ventral side, but without an *eraillure* scar. Both planes forming the dorsal side are previous extraction scars. The left one was probably used as the finger-resting edge, if this blade was really utilized as a cutting tool in the modality of backed knife. The left edge has no traces of use-wear, and the micro-serration visible along it is simply the visual effect caused by the terminations of the impact striations from the ventral side. The right edge, though, does present the apparent evidence of high-pressure notching and micro-scarring consistent with its use as a cutting tool. The dorsal side presents localized depositions of cemented carbonates.

#897. Item no. 3120-17071

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	21/01/2019	C5-SW	-	5.57	283906.71	2724526.79	1604A	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F?	Blade, modified?	32.5	15.6	10.9	5.81	V		



Characterization. This artefact is a thick, robust blade or blade-like flake, probably a corner blade extracted from a tabular core of green limestone, completely covered by a thick coating of fine-grained and coarse-grained cemented sediments. The proximal end is thick, unprepared, naturally dihedral. This is probably a tool-on-blade, a cutting tool utilized in the modality of a backed knife, using the square side covered by cemented sediment as the finger-resting/grabbing section of the tool. The presumed working edge presents the expected serrated profile and discontinuous micro-notching, although the thick coating obstructs the proper understanding of features.

#898. Item no. 4224-16870

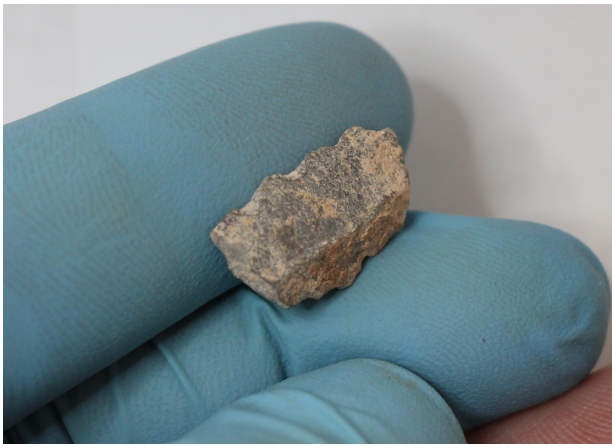
Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	13/02/2019	C5-SW	-	5.52	283906.69	2724526.94	1604A/ 1604	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
Ef, F	Blade-like flake, used	30.8	24.1	4.7	4.36	V		

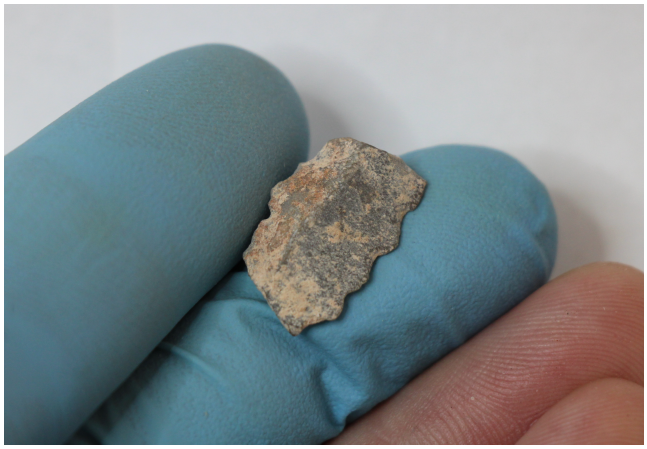
Characterization. This artefact is an interesting and significant specimen. It is a large and wide, relatively thin, tertiary blade-like flake of fine-grained green limestone, that can be considered a tool-on-flake, presumably a cutting tool with two working edges. The flake is slightly curved over its ventral side, and the distal end is defined by a bending fracture. The proximal-left section of the dorsal side and the distal margin of the ventral side are both covered by cemented muddy sediment. The platform is cortical, flat, unprepared, associated with an

impact bulb formed to the right, on the ventral side. The left edge was fractured, probably by human agency, into a flat-top concave shape, suitable as a finger-resting surface. This would be related to the working edge function of the opposite edge. Its whole length shows evident use-wear formed by cutting activity. The second working area is the thin, convex edge located between the fractured left margin and the proximal section. This part of the piece displays evidence of use-wear derived from cutting soft material. The pressure came from the dorsal side and the micro-scars and micro-notches formed in a beveled way over the ventral side. This artefact can be considered a cutting tool-on-flake.

#899. Item no. 3843-17119

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	03/02/2019	A6-SW	-	5.86	283904.69	2724527.61	1605	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F	Blade, used	17.5	11	3.3	0.66	V		





Characterization. This small artefact is a fragmentary, secondary micro-blade of dark-green limestone, seemingly a medial fragment, with both ends marked by diagonal (non-parallel) fracture planes. This item is a tool-on-blade. The lateralization of the artefact was done arbitrarily, as there is no form to identify the true proximal end. The ventral side shows deep, marked impact ripples, but their orientation is uncertain. The left dorsal side preserves portions of the original cortex. The dorsal ridge is low and displaced to the left. The right edge is the working edge of a presumed cutting tool. The use-wear is evident, in the form if three non-adjacent micro-notches caused by pressure, originating perpendicularly and slightly from the ventral face. These notches are anthropic.

#900. Item no. 4127-17133

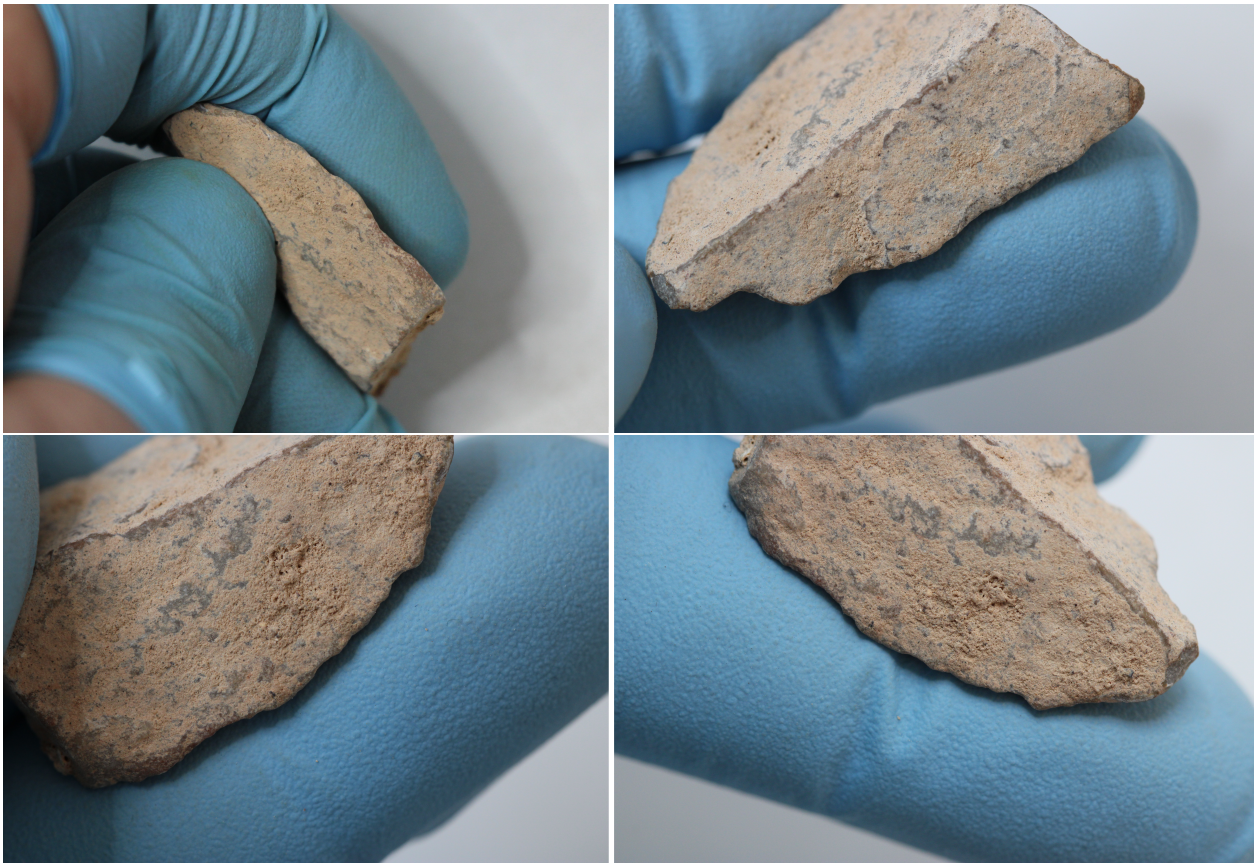
Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	09/02/2019	C4-NE	5.60/ 5.55	5.57	283907.12	2724526.34	1605	B

Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
Ef, F?	Blade-like flake, modified?	22.5	20.3	4.2	2.17	V		

Characterization. This almost triangular artefact is probably a tool-on-flake, made on a tertiary or secondary blade-like flake that bears the scar of a previous bladelet extraction, visible longitudinally at the centre of its dorsal side. Both faces, especially the dorsal one, is coated by a fine layer of sediment depositions. The entire wide and narrow proximal end is a platform, a fact confirmed by the presence of a shallow protuberance below its ventral edge, near an *eraillure* scar. The entire left edge presents the indicators of having been intentionally shaped into a serrated convex edge, continuous until reaching the distal tip, obtained by percussion retouch, probably in order to produce a handheld cutting or scraping tool.

#901. Item no. 4175-17138

Exc. nr.	Discovery date	Square-subsq.	Depth range Z(D)	Depth Z(datum)	UTM E (x)	UTM N (y)	Stratum	Stratig. comp. (SC)
X16	11/02/2019	C5-SW	5.55/ 5.50	5.52	283906.77	2724526.64	1605	B
Taxon code	Taxon definition	Length (mm)	Width (mm)	Thickness (mm)	Weight (g)	Raw material class		
E, F	Blade, used	32.6	19.2	7.4	4.72	V		



Characterization. This artefact is the distal, feather-ended termination of a blade, with possible use-wear on the lateral convex edges, which makes of this item a plausible tool-on-blade. The dorsal face has a low central ridge, and is covered by a thick coating of orange-brown sediment. The proximal section is missing, by bending fracture. The ventral side is smooth, slightly convex, and marked by fine impact striations. At its centre, the right edge reveals fine micro-retouch, probably as a result of the utilization. The convex left edge presents certain degree of polish, while the visible micro-serration is rather the natural effect of the terminations of impact striations from the ventral face. The artefact appears to have been used, but the evidence is largely obstructed by the sediment coating.